

spinolae. What we do not know is whether *M. diversiceps* attacks only *Pison* species and *M. punctulaticeps* parasitizes only thynnine wasps. Regrettably, these parasitic beetles are rarely reared from their hosts.

Acknowledgement

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OBSERVATIONS OF THE TAILED EMPEROR *POLYURA PYRRHUS* SEMPRONIUS (LEPIDOPTERA: NYMPHALIDAE) IN SOUTH AUSTRALIA

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Introduction

Since my childhood I had seen the tailed emperor *Polyura pyrrhus sempronius* (F.) in areas of Sydney but was surprised to find it common in Adelaide. It has only recently been recorded from South Australia (Hatch, 1977; Quick, 1974), the species being previously known only from eastern and northern Australia. This paper lists further records for South Australia and records observations on the behaviour of the species.

Sightings and observations

I found this butterfly plentiful in Veale Gardens, an Adelaide park, from 8th February to 25th March 1976. I visited the Gardens regularly during this period and made notes as follows:—

First sighting, 8th February. Two males were sighted and captured. One was netted and the other "plucked" from a branch of a tree by hand. This tree, which was later identified as *Polygala myrtifolia* L., was yielding a frothy, white sap, tasting bitter-sweet and alcoholic, and it was on this that the second butterfly was feeding when it was taken. The sap came from the limbs of the tree, only a few feet from the ground. These insects usually have a very rapid, definite type of flight and are almost impossible to net until they either land

or are engrossed in drinking. Those that have been feeding for some time on fermenting sap are often easy to capture.

Second sighting, 28th February. During the morning two males and one female were netted about the same tree. In the afternoon I "plucked" a freshly emerged male from the same tree, while it was sipping the flowing sap.

Third sighting, 2nd March. One male netted.

Fourth sighting, 3rd March. Six males taken by net. The butterflies, if disturbed when feeding flew high up into the air, but did not travel far.

Fifth sighting, 13th March. Two males and one female taken. Other females, some on the wing and some feeding, were to be seen in the early morning sunshine at the same tree. These were feeding as late as dusk. I observed, on this occasion, that when specimens alighted on the tree trunk they ran briskly about with proboscies extended, apparently searching for a choice area of frothy sap. I made several cuts into the tree branches to entice further butterflies. The external cuts I made were seen to heal in a matter of two to three days. A female Common Brown *Heteronympha merope merope* (F.), was seen feeding amongst the congregating *P. p. sempronius* males on this occasion.

Sixth sighting, 15th March. One female taken while feeding on sap with an Australian Admiral *Vanessa itea* (F.) in the early morning. During the morning I witnessed approximately twenty males flying in the vicinity of the same tree. It was noted that in the mornings adults flew about and did not seem to be particularly interested in feeding, but rather in flying, and alighting, head down, on leaves and branches of almost any tree. Males appeared to be territorial at this time, some individuals choosing a particular twig or leaf of a tree for their vantage point. If a male sighted another male within a radius of some 10 m it would fly directly at it, chasing it until it left the area. If a female flew into the area the male acted as if trying to attract the female and at times would successfully mate. During the afternoon I visited the spot again. There seemed to be no sign of the butterflies at all. On each previous visit adults were obvious as they flew in the area and encircled the tree (food source). I became curious and after quietly approaching the tree I saw there, sitting on a long thin branch and feeding from the sap, eight perfect specimens, six males and two females. I decided to select and take the two females and "plucked" them gently from the tree, one at a time. None of the others moved.

Seventh sighting, 25th March. Three males and one female taken.

Discussion

The discovery of *Polyura pyrrhus sempronius* in South Australia in such numbers is indeed unexpected. It would appear that the species is now well established in Adelaide and can be expected to remain a permanent resident.

Acknowledgement

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